

Letter from the Editors

As we enter 2026, the space domain continues to evolve from a frontier of pure technological conquest into a complex environment requiring sophisticated legal frameworks, sustainable management strategies, and a deeper understanding of human resilience. The challenges we face today are no longer limited to propulsion and orbit; they now encompass the nuances of international law, the preservation of our home planet's ecosystems, and the psychological well-being of the professionals who drive this industry forward.

This issue of the *Space Education and Strategic Applications* (SESA) Journal reflects this expanding scope, bringing together a diverse collection of research that bridges the gap between technical capability and sustainable practice.

The issue opens with a critical examination of the human factor in aerospace environments. As the industry moves beyond merely surviving the harshness of space to establishing long-term presence, the mental health of our workforce is paramount. We present an article advocating for evidence-based approaches to “crafting” personal narratives in aerospace healthcare. This research suggests that by embracing narrative practices, professionals in high-stress environments can foster positive upward spirals, moving from a state of survival to one of genuine thriving.

Shifting focus from the internal human experience to planetary stewardship, this issue also highlights the vital role of space-based technologies in Earth management. We feature a student submission detailing the importance of remote sensing in monitoring plant health and ecosystems. As environmental concerns grow, the ability to utilize airborne and satellite imagery to inform habitat managers and policymakers is becoming increasingly crucial for maintaining healthy, sustainable ecosystems.

On the legal and geopolitical front, this issue tackles the friction between outdated governance and modern commercial realities. With the geopolitical landscape vastly different from when the Outer Space Treaty of 1967 was established, we present a compelling argument for the creation of “Near Space Exclusive Economic Zones.” Drawing on maritime law and the United Nations Convention on the Law of the Sea, this article proposes a new legal framework that grants space-faring nations economic rights up to the Kármán line without imposing full sovereignty, aiming to deter conflict and encourage economic development.

Finally, we are proud to present our Student Scholarship Selection, which provides a comprehensive review of the challenges facing a crewed mission to Mars. This article analyzes NASA's three-phase plan—from the ISS to the Proving Ground in cislunar orbit, and finally to the Red Planet—while candidly addressing

the technological gaps and the increasing significance of commercial contributions given the uncertainties surrounding the Space Launch System.

Against this backdrop of innovation and inquiry, we hope these articles spark robust discussion regarding how we govern, inhabit, and protect the space domain. We express our appreciation to the authors who contributed to this issue, our editorial board for their continued diligence, and our readers for their support.

Sincerely,

Kristen Miller & Gary Deel

Co-Editors in Chief, *SESA Journal*